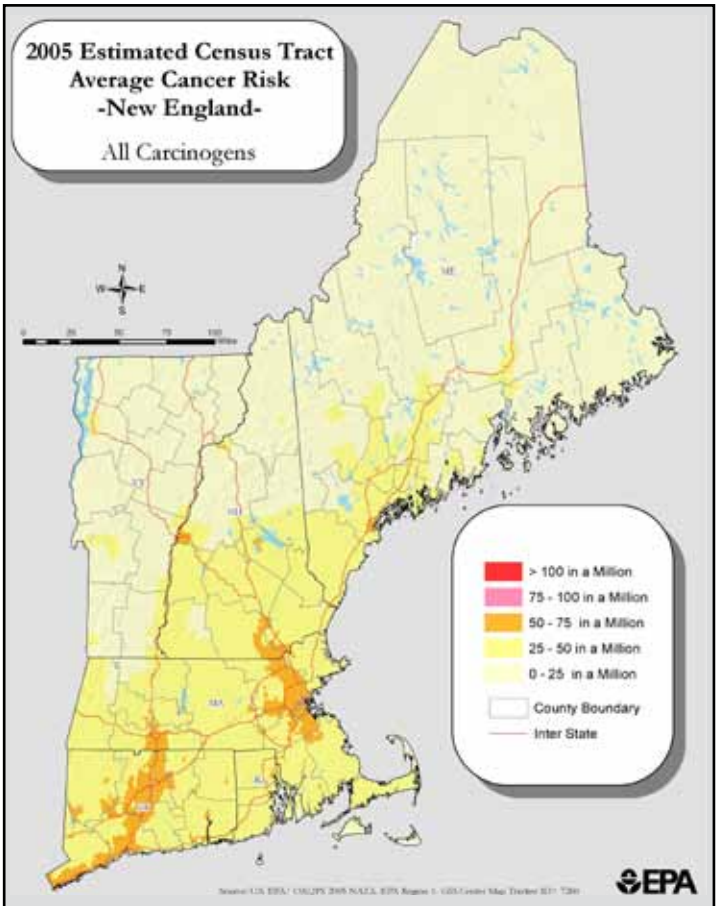
United States Environmental Protection Agency

2005 National Air Toxics Assessment

(NATA) NEW ENGLAND



- The cancer risk map represents the summation of outdoor air inhalation risks of carcinogens. It does not include all pollutants or exposure estimates from other pathways.
- EPA also assessed public health risks for other health effects, such as asthma, that may result from exposure to these hazardous air pollutants.
- New England continues to be a region impacted by air toxic emissions generated by mobile sources, local area sources, as well as industrial and natural sources.
- The NATA modeling of ambient air concentrations typically estimates lower concentrations than actual monitoring results for many pollutants.

Air Toxics of Greatest Concern in New England

- State average risk values of five air toxics: acetaldehyde, benzene, carbon tetrachloride, formaldehyde and polycyclic organic matter (POM) exceeded health benchmarks in every state in New England, and state average risk values of five air toxics: 1, 3-butadiene, acrolein, arsenic compounds, chromium compounds and naphthalene exceeded health benchmarks in at least one state in New England.
- Mobile sources represent a significant emission category for acrolein, acetaldehyde, benzene, 1,3-butadiene, diesel particulate, formaldehyde and naphthalene.
- Combustion sources represent a significant emission category for acrolein, acetaldehyde, arsenic and chromium compounds, naphthalene, and POM. This includes emissions from electric utility boilers, industrial boilers, as well as residential wood stoves and fireplaces.
- Background sources, including natural sources, unidentified sources, and long-range transport, account for significant ambient air concentration estimates for 1,3-butadiene, arsenic and chromium compounds, benzene, and carbon tetrachloride.
- Atmospheric transformation accounts for significant ambient air concentration estimates for acetaldehyde, acrolein and formaldehyde.

New and Continuing Actions to Reduce Risks

- Implementing stationary source air toxics standards
- Improving monitoring and emission inventories
- Requiring cleaner gasoline and tightening tail pipe standards
- Funding community comprehensive risk reduction projects under programs such as Community Action for a Renewed Environment (CARE)
- Expanding diesel reduction initiatives
- Promoting energy efficiency
- Providing pollution prevention assistance to sources
- Implementing the National Collision Repair Campaign
- Encouraging voluntary and regulatory efforts to address wood smoke emissions

For more information: www.epa.gov/region1/airtox/index.html